

## Department of Public Safety

JESS L. ANDERSON Commissioner

TED BLACK State Fire Marshal

DEIDRE M. HENDERSON Lieutenant Governor

Dear School District,

The increased need for electronics in our schools has created some electrical fire hazards. The need to charge Chrome Books and I-Pads has prompted many unique and creative products and ideas, i.e. charging carts, Tech Tubs, and charging shelves. While each cart and/or charging setup can differ slightly the same hazards need to be avoided.

Charging Carts that have been purchased from a supplier are a great way to keep tablets organized, secure and charged. These carts have been tested and listed for this use. However, these carts can draw between 10 and 15 amps, and have the potential to cause an electrical overload situation if installed incorrectly. These carts need to be plugged directly into a wall outlet served by the building electrical system. Some of these carts even have a yellow caution sticker that says "Power: To prevent power overload, separate circuits (NOT SEPARATE OUTLETS!) are required for plugging in each multi outlet unit." Our office has seen many of these carts plugged into power strips, plugged into another charging cart and plugged into extension cords. This violates the listing of the cart and is not code compliant.

Shelves and carts that have been converted into charging stations are another common hazard. The challenge is trying to charge 20 plus tablets at the same time. This has prompted Daisy-Chaining, plugging relocatable power taps (RPT), sometimes referred to as multi plug adapters, into one another. Daisy-Chaining is not allowed due to the increased potential for overloading, and RPT's are not listed for such use. International Fire Code Section 604.4.2 requires that RPT be connected to a permanently installed receptacle. OSHA Standard 29 CFR 1910.303(b)(2) Installation and use. Listed or labeled equipment shall be installed and used in accordance with any instructions included in the listing or labeling. UL 1363 1.7 A cord-connected RPT is not intended to be connected to another cord-connected RPT.

Another consideration for all types of charging stations is location. These should not be located where they block doorways or egress paths in classrooms. Corridors also need to be kept clear of obstructions including charging stations.

I have encountered many of these electrical fire hazards in a majority of the schools I have inspected. This needs to be corrected and I am asking that you work with your schools to address these hazards and avoid creating them in the future.

I appreciate your attention to this issue. If you have any questions or if I can be of further assistance please let me know.

Sincerely,

Cory Feese Deputy State Fire Marshal 410 W 9800 S, Ste 372 Sandy, UT 84070 801-419-9392

